DOCUMENT RESUME

ED 215 210 CE 032 114

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TITLE Educational and Employment Experiences of the Younger Adult Worker.
SPONS AGENCY Office of Vocational and Adult Education (ED), Washington, DC.
PUB DATE 82
CONTRACT 300-78-0032
NOTE 39p.; Paper presented at the Annual Conference of the American Educational Research Association (New York, NY 1982). For a related document see CE 031 902.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Apprenticeships; Educational Attainment; *Educational Experience; Educational Research; *Education Work Relationship; *Employment; Employment Experience; Job Training; National Surveys; Outcomes of Education; Postsecondary Education; Salaries; Secondary Education; Surveys; *Vocational Education; *Young Adults

ABSTRACT

The Younger Adult Worker (YAW) study examined the systematic long-term relationship between exposure to vocational education and various indices of educational and employment outcomes. A telephone survey of 1539 young adults between the ages of 20 and 34 supplemented information from the 1966-78 National Longitudinal Surveys of Labor Market Experiences for Young Men and Young Women and National Longitudinal Study of the High School Class of 1972. Analysis showed completion of a public postsecondary vocational program was positively associated with the marketing area for YAW men. For the class of 1972 a significantly positive coefficient was found for the trade and college prep variables. College prep and high socioeconomic status were positive predictors of college completion for the YAW sample. Significant negative predictors were the trade area for men and the business area for women. Trade areas were significantly positively associated with completion of apprenticeship training. Positive earnings effects were found for male marketing and trade and female business and trade graduates. Graduation from a vocational high school curriculum was negatively associated with completion of traditional postsecondary education, but positively associated with completion of nontraditional postsecondary. Study results strongly indicated sex stereotyping in vocational programs and employment. (Data tables comprise approximately one-half of the report). (YLB)

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EDUCATIONAL AND EMPLOYMENT EXPERIENCES OF THE YOUNGER ADULT WORKER

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Vocational development theory suggests that a relationship exists between educational experiences and subsequent career outcomes (Lawrence & McAdams, 1978). Recent research provides support for the existence of that relationship, however, its exact nature continues to be elusive (Mertens et al., 1980). Because of vocational education's goal to prepare young people for employment, great interest has arisen in its role in the career development process (Campbell et al., 1981 a and b; Grasso & Shea, 1979; Gustman & Steinmeier, 1981; Mertens & Gardner, 1981; Meyer, 1981).

Critics of vocational education contend that, because the vocational curriculum prepares students for immediate employment, it limits longer-term opportunities. Vocational education does so, these critics allege, by directing, or "tracking," disadvantaged minority and female youngsters into programs that prepare them for low status, low paying jobs that offer no opportunity for advancement. Evidence from previous studies has not established whether or not this criticism of vocational education is

CE 032 114

Paper presented at the 1982 American Educational Research Association, New York, N.Y.

The research reported herein was supported in part by Contract Number OEC-300-78-0032 from the Department of Education, Office of Vocational and Adult Education. The views expressed are those of the authors.

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valid. A comprehensive review of literature on the effects of participating in vocational education indicated that for at least some groups of students, participation in vocational education aids in school to work transition and may be associated with certain labor market advantages in the first few years after leaving high school (Mertens et al., 1980). However, most of the studies that were reviewed limited their analyses to a few months or years following program completion.

Therefore, the National Center for Research in Vocational Education undertook a study to examine the systematic long-term relationship between exposure to vocational education and various indices of educational and employment outcomes. The study, entitled the Younger Adult Worker (YAW), commissioned a new survey because no existing data bases contained all the information needed to assess the longer-term effects of vocational education (Mertens & Gardner, 1981). Only the 1966-78 National Longitudinal Surveys of Labor Market Experiences for Young Men and Young Women (NLS-LME Boys and Girls) provided sufficient labor market history for younger adult workers up to fifteen years out of high school. However, those surveys did not have information on the specific vocational education program areas studied by the young workers while they were in high school. The National Longitudinal Study of the High School Class of 1972 does contain information on educational program areas and detailed labor market experience. However, the time (seven years) between high school

graduation and the most recent (fourth) follow-up is too short to assess the long-term effects that were the focus of this study.

Despite their shortcomings for the purpose of this study, the NLS-LME Boys and Girls and the Class of '72 permit revealing parallel analyses for at least some of the variables of interest here. Comparisons among these three data sets are made whenever possible in the discussion of the analysis of the YAW survey data.

Methodology

Procedures. The YAW survey was conducted by telephone interviews between January and March of 1981. The population of interest was high school graduates, between the ages of twenty and thirty-four, who were in the civilian labor force, working or seeking employment. Screening was conducted to insure an over-sampling of respondents who reported completion of a vocational program when in high school. The Gallup Organization was chosen to select the final sample and to field test and administer the questionnaire.

The actual sample telephone numbers used in the survey were produced for the Gallup Organization by Survey Sampling, Inc., using its computer files specifying all working banks in all telephone exchanges in the contiguous forty-eight states. A sampling frame of fifty-seven million households was constructed using currently operative area code-exchange combinations to eliminate nonresidential exchanges. The sampling methods were designed to yield a systematic random sample of telephone numbers, both

listed and unlisted. The actual sample was stratified to all counties, so that the number of observations within each county was proportional to that county's share of the total pool of households with telephones.

A sixty-one item fixed-format questionnaire was created to measure the selected variables in the study, including background information, employment history, experiences on the first/full time and current jobs, and secondary and postsecondary schooling. The instrument was field-tested and revised. The questionnaire took approximately fifteen to twenty minutes to be administered by telephone.

Sample. The sample consisted of 1,539 young adults between the ages of twenty and thirty-four who were identified--from preliminary screening questions--as being in the civilian labor force (i.e. working or looking for work and not in the armed forces, prison or other residential institution). The analyses described subsequently are based on 1,268 rather than 1,539 cases. Three considerations accounted for the attrition of the sample. First, 158 individuals were dropped because, despite their answers to initial screening questions, later questions revealed that they were not in the civilian labor force. Second, an additional 68 were dropped because they were not high school graduates. Third, another 45 were dropped because of implausible or inappropriate answers to the survey questions.

The distribution by high school curriculum and vocational program areas for the YAW, NLS-LME Boys and Girls, and the Class

of '72 data sets is displayed in Table 1. For further information concerning the characteristics of the latter two data sets, the reader is referred to the work of Grasso and Shea (1979) and Taylor, Stafford and Place (1981). The breakdown of the YAW sample by race and sex is presented by curriculum in Table 2 and by vocational program area in Table 3.

The profile of vocational students that emerged from the YAW survey agrees with the patterns found in other studies and can be summarized here as follows. Vocational students are more likely than general or college prep students to be white females or black males. They are less likely than college prep students to come from a family with a high socioeconomic status and also less likely than general curriculum students to come from a low socioeconomic status family. Males are less likely to be married. Like their general curriculum counterparts, the vocational students are more likely than college prep students to live in a rural area. And they are more likely than either college prep or high school or general students to have received occupational information in high school or assistance from teachers in finding jobs. That is, there are substantial differences across curriculum groups with respect to at least several factors that affect labor market experiences and postsecondary education patterns. Thus, comparison of labor market experiences or educational attainment by curriculum group must control for the impact of these other factors if accurate conclusions are to be drawn about the effects of curriculum.

Analysis. Labor market experiences, educational attainment, and occupational and educational aspirations are interrelated in complex ways that are not well understood. No comprehensive theory of the relationship has gained widespread acceptance, and none of the national longitudinal surveys in this study were grounded in a specific vocational development theory (Lawrence & McAdams, 1978). Because the data bases are not explicitly linked with any one of the major vocational theories or concepts[1], another organizing scheme was developed to guide the analysis. Figure 1 outlines a framework through which measures in the labor market surveys are linked together and related to labor market outcomes. Specific elements within each broad category are listed in Table 4.

The diagram is constructed around a central decision point that is hypothesized to be affected by individual attributes, the general context in which decisions are made, early educational experiences, labor market conditions, family responsibilities, and postsecondary educational experiences. These variables were selectively used in the computation of cross-tabulations that reveal broad, surface relationships between curricula or programs and either individual characteristics or outcome measures. However, controlling the bivariate relationships for the influence

[1]The reader interested in a comprehensive review of vocational development theory is referred to Betz, 1977; Crites, 1969; Holland, 1976; Lawrence & McAdams, 1978; Miller, 1974; Osipow, 1973, 1976; Super & Hall, 1978; and Zaccaria, 1970.

of a third (or nth) variable is difficult when only crosstabulations are used. Ordinary least squares regression analysis was employed to analyze those more complex interrelationships and to estimate the partial relationships between two variables while controlling for the influence of other variables. A list of the variables used in the regression analyses is displayed in Table 5.

The simple tabular analyses suggest that the regression analyses should be partitioned into four race/sex groups and that indicators of participation in vocational education should distinguish among program areas. This ideal partitioning is restricted by small response frequencies in the YAW sample for nonwhites and for the agriculture, health and home economics program areas. Hence, separate equations could not be run for each race/sex group, and agriculture, health and home economics graduates were combined into an "other" vocational education category in the regression analyses.

The comparison among high school curriculum groups was achieved in one set of earnings equations by including explanatory variables that indicated completion of various postsecondary educational experiences. A sharper comparison was made by restricting the analysis in another set of earnings equations to high school graduates who had no formal postsecondary education.

Results

In the YAW survey, respondents were asked about their participation in a number of different types of postsecondary

training, including public and proprietary two-year programs, four-year college or university, advanced degree programs, apprenticeship, employer-sponsored training, government-sponsored training, and military training. This discussion focuses on the traditional postsecondary avenues of public two-year programs and four-year colleges or universities, and the nontraditional avenues of apprenticeship and employer-sponsored training. This is followed by a discussion of the types of jobs that the younger adult workers held and of the interrelationship of educational experiences and earnings on the current or last full-time job.

Education

The dependent variable in the regression analyses of postsecondary educational experiences was a dichotomous variable that equalled 1 if the respondent had completed the program, 0 otherwise. It is well-recognized that this kind of dependent variable is inconsistent with the usual assumptions of normality and homoscedasticity. But the utility and simplicity of such linear probability models argues for their use in many situations, as long as the limitations of such estimates are clearly understood (Pindyck and Rubinfeld, 1976). Hence, although the term "significance" is used in discussing these linear probability models, a strictly correct statement would require the qualification that the usual tests of significance are not appropriate in these cases and that the calculated t-values are only suggestive of a significant relationship.

Public two-year programs. For the YAW sample, 21 percent of vocational, 18 percent of general and 15 percent of college prep graduates participated in a public community college or technical nstitute. Regression results for YAW men revealed that secondary-level marketing graduates reported completion of public postsecondary vocational programs significantly more often than did their general peers (Table 6). For YAW women, none of the vocational program areas were significantly different from the general curriculum. In the Class of '72 regression analyses revealed that the coefficients for men and women that were significantly positive included those for the college prep and trade variables, and that rural residence was significantly negative for both groups (Table 7). Business was also significantly negative for women. None of the NLS curriculum variables were significant predictors of completion of a business college or technical institute (Table 8). As the regression results from the different data bases do not correspond to each other, it is possible that the results are sample specific, that the differences in question-wording accounts for the differences, or, in the case of the NLS-LME, that aggregation of vocational program areas obscured differences.

Four-year college or university. In the YAW sample, 17 percent of vocational, 29 percent of general, and 69 percent of college prep graduates participated in a four-year college program. The YAW men's regression results indicated that the trade program was associated with a significantly negative coefficient for

completion of a four-year college or university degree (Table 9). Significant positive predictors for both men and women were high SES and completion of a college prep curriculum. For women, rural residence and the business and other vocational categories had significant negative coefficients. The Class of '72 regression analyses confirmed the positive influence of the college prep variable, however, all of the vocational education coefficients are significantly negative (Table 10).

Apprenticeship. Participation in apprenticeship training was low across all curricula for the YAW sample: 16 percent for vocational, 8 percent for general, and 18 percent for college prep. Based on regression analyses for both YAW men and women, the trade variable was associated with a significant positive effect on completion of an apprenticeship program (Table 11). For women, college prep was another significant predictor. The Class of '72 regression results confirmed the positive association between trade for men and women and apprenticeship training (Table 12).

Employer-sponsored training. Participation in employer-sponsored training for the YAW sample was reported by 21 percent of vocational, 16 percent of general, and 24 percent of college prep graduates. Based on the regression results for YAW men, marketing and trade were significantly positively associated with completion of an employer-sponsored training program (Table 13). For women, the marketing and college prep variables were significantly positive. The Class of '72 and NLS analyses did not

support the positive relationship between the vocational variables and completion of employer-sponsored training. However, the college prep variable was positively significant for the two data bases (except NLS-LME Boys).

Type of Occupation

Occupational classifications were defined in the YAW survey to conform to the three-digit U.S. Census occupation codes. When prestige of the job was analyzed, the Duncan prestige scores were assigned using those codes. All of the analyses reported here were based on the standard aggregation of the three-digit codes into classes such as "professional" or "laborer." It is well known that generalizations based on such broad aggregations must be weak. Nevertheless, a general picture of the relationship between vocational training and occupations can be drawn here.

The distribution of YAW respondents among occupational categories revealed that former vocational students were concentrated in three occupational classes. More than 51 percent of vocationally educated men were employed in craft or operative jobs; about 60 percent of vocationally educated women were employed in clerical jobs. Business and trade graduates held professional or managerial jobs in about the same proportions as their representation in the sample.

Occupational prestige is measured by the scores from the Duncan prestige index that applies to the respondent's three-digit census occupation. Regression results for YAW men revealed insignificant (but positive) coefficients for vocational program

variables, indicating no difference in prestige for vocational and general men. YAW women who took a business program enjoyed a significant advantage when compared to their general peers. On the other hand, women who took trade programs experienced a significant disadvantage in prestige. Thus, female trade graduates appear to be trading higher wages for prestige.

Earnings

The average hourly wage for YAW white males on their most recent job was $7.55 for vocational, $7.56 for general, and $8.94 for college prep graduates. Parallel results for minority males were $6.86 for vocational, $6.30 for general, and $8.88 for college prep. Regression results for YAW men revealed that college prep is the only secondary-level curriculum variable associated with significantly higher earnings (Table 14). Postsecondary variables that were significantly positive included four-year college, advanced degree, and private two-year programs. The Class of '72 analyses for men revealed a significant negative coefficient for business and a significant positive coefficient for trade when the total sample was included (Table 15). When the NOCOL sample was used, marketing was associated with a significant positive coefficient. Postsecondary variables significantly positively associated with high earnings included apprenticeship, employer-sponsored training, four-year and advanced degrees, and vocational-technical training.

The average hourly wage for YAW white females was $5.62 for vocational, $5.66 for general, and $6.73 for college prep.

Parallel results for minority females were $5.69 for vocational, $4.73 for general, and $6.32 for college prep. Based on regression analyses for YAW women, marketing is associated with a significant negative coefficient and trade is associated with a significant positive coefficient (Table 14). Business is associated with a significant positive coefficient only when the sample is restricted to individuals with no college. Postsecondary variables associated with a significant increase in earnings included four-year college, employer-sponsored training, and two-year proprietary schools. The Class of '72 analyses for women, supported the positive findings for business (Table 15). However, the other vocational category had a significantly negative coefficient; and college prep had a significantly positive coefficient. Significant positive coefficients for postsecondary variables included four-year and advanced degree, two-year vocational-technical programs, apprenticeship and employer-sponsored training.

Discussion

The analysis of earnings data for the YAW and Class of '72 surveys indicates that effects of vocational education on earnings extend beyond the immediate post-high school period. The effects vary across program area and by gender. For the most recent job for men, there is strong evidence that a marketing program is associated with higher earnings compared to general curriculum graduates. Trade programs appear to increase earnings, but the evidence is not as strong as for the marketing

program. Business programs (which include some occupations that are traditionally held by women) and a composite of health, home economics, and agriculture programs are associated with lower earnings for men. For women trade and business programs tend to be respondents with higher earnings when the comparison is restricted to respondents who have had no college education. Marketing is associated with lower earnings for that same group of women. Postsecondary vocational education is associated with higher earnings for both men and women.

In terms of traditional postsecondary education, completion of a public postsecondary vocational program was positively associated with the marketing area for YAW men. For YAW women and for the NLS cohort none of the vocational curriculum variables were significant. For the Class of '72 cohort a significantly positive coefficient was found for the trade and college prep variables. College prep and high SES were positive predictors of completion of four years of college for the YAW sample. Significant negative predictors were the trade area for men and the business area for women.

In terms of nontraditional postsecondary experiences, the YAW and Class of '72 trade areas were significantly positively associated with completion of apprenticeship training for both men and women. For YAW men, the marketing and trade areas were significantly positively associated with completion of such training. The Class of '72 and NLS results did not confirm the

positive findings for the vocational variables; however, they did confirm the positive findings for college prep.

The results concerning the earnings for the three curriculum groups definitely discount the allegations that vocational education prepares youngsters for low status, low paying jobs. Positive earnings effects were found for male marketing and trade graduates, as well as for female business and trade graduates. However, consistently negative effects on earnings were found for women in the "other" category, as well as for women as compared to men.

Generally, graduation from a vocational high school curriculum was negatively associated with completion of traditional postsecondary education. However, it was positively associated with completion of nontraditional postsecondary experiences such as apprenticeship and employer-sponsored training, and completion of these programs was associated with higher earnings than for students from a general curriculum who did not complete them.

The results of this study strongly indicate that sex stereotyping has been a pervasive element in the type of vocational program and in the type of employment experienced by the Younger Adult Worker cohort. Enrollment of men and women in vocational programs was primarily by traditional sex stereotypes (i.e., women in business, health and home economics; men in trades and agriculture). Following from this, the type of occupation obtained by men and women was also according to traditional sex stereotypes.

A recent study in fifteen states indicated that the percentage of women in nontraditional programs rose from 6 percent in 1972 to 10 percent in 1978 (National Advisory Council on Vocational Education and National Advisory Council on Women's Education Programs, 1980). Although this is a positive trend, it is clear that sex equity continues to be a critical issue for vocational educators. Its importance is underscored by two specific findings in this study: First, the significant earnings advantages that are experienced by males as compared to females, and second, women experience an earnings advantage in the nontraditional trade area. Together, these findings suggest an important role for vocational education in reducing inequities based on sex.

The sex equity area is in need of further research to examine such issues as the course entry process, training in school, placement of students, and attitudes and behaviors of administrators, teachers, counselors, parents, and students. Many other areas related to sex equity and vocational education are also in need of further research, including the definition of the federal role, the need for supportive services such as child care, staff and materials development, and the role of the sex equity coordinator.

Other areas in need of further research include: 1) improvement of the identification of high school curriculum; 2) the effect of self-selection bias; 3) linkages between proximate and more remote effects of high school curriculum;

4) effects of high school work experience on later labor market experiences; and, 5) effect of vocational education on the prevention of high school dropouts.

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TABLE 1

DISTRIBUTION OF SAMPLES BY HIGH SCHOOL CURRICULUM AND VOCATIONAL PROGRAM AREAS

	YAW	NLS-LME Boys	NLS-LME Girls	Class of '72
	n = 1,250	n = 603	n = 992	n = 4,987
College Prep	29.2%	36.5%	32.9%	34.7%
General	17.4	49.3	45.0	47.1
Vocational	53.4	14.1	22.0	18.1
Agriculture	4.7	-	-	6.8
Marketing	3.4	-	.7	10.4
Health	2.0	-	-	4.0
Home Ec	2.7	-	3.3	4.8
Business	34.4	22.7	89.4	48.6
Trade	51.0	77.3	6.6	25.5

TABLE 2

RACE AND SEX BY CURRICULUM

YOUNGER ADULT WORKERS

RS	CUR	1 VOCATIONAL	3 COLLEGE PREP	4 GENERAL	ROW TOTAL
1 WHITE MALE	COUNT	253	187	105	545
	ROW PCT	46.4	34.3	19.3	43.6
	COL PCT	37.9	51.2	48.4	
	TOT PCT	20.2	15.0	8.4	
2 WHITE FEMALE	COUNT	311	135	74	520
	ROW PCT	59.8	26.0	14.2	41.6
	COL PCT	46.6	37.0	34.1	
	TOT PCT	24.9	10.8	5.9	
3 MINOR MALE	COUNT	57	21	17	7.
	ROW PCT	60.0	22.1	17.9	
	COL PCT	8.5	5.8	7.8	
	TOT PCT	4.6	1.7	1.4	
4 MIN FEM	COUNT	47	22	21	90
	ROW PCT	52.2	24.4	23.3	7.2
	COL PCT	7.0	6.0	9.7	
	TOT PCT	3.8	1.8	1.7	
COLUMN TOTAL		668	365	217	1250
		53.4	29.2	17.4	100.0

NUMBER OF MISSING OBSERVATIONS = 18

TABLE 3

RACE AND SEX BY VOCATIONAL PROGRAM

YOUNGER ADULT WORKERS

RS	V23	AGRICULTURE	MKTG,D.E	HEALTH	HOME ECONOMICS	TRADE OR INDUSTR	BUSINESS OFFICE	OTHER	ROW TOTAL
		1	2	3	4	5	6	7	
WHITE MALE	1	25	9	1	1	163	39	8	246
	ROW PCT	10.2	3.7	0.4	0.4	66.3	15.9	3.3	37.6
	COL PCT	80.6	40.9	7.7	5.6	72.4	11.7	66.7	
	TOT PCT	3.8	1.4	0.2	0.2	24.9	6.0	1.2	
WHITE FEMALE	2	2	13	11	11	18	249	3	307
	ROW PCT	0.7	4.2	3.6	3.6	5.9	81.1	1.0	46.9
	COL PCT	6.5	59.1	84.6	61.1	8.0	74.6	25.0	
	TOT PCT	0.3	2.0	1.7	1.7	2.7	38.0	0.5	
MINOR MALE	3	3	0	0	3	39	10	1	56
	ROW PCT	5.4	0.0	0.0	5.4	69.6	17.9	1.8	8.5
	COL PCT	9.7	0.0	0.0	16.7	17.3	3.0	8.3	
	TOT PCT	0.5	0.0	0.0	0.5	6.0	1.5	0.2	
MIN FEM	4	1	0	1	3	5	36	0	46
	ROW PCT	2.2	0.0	2.2	6.5	10.9	78.3	0.0	7.0
	COL PCT	3.2	0.0	7.7	16.7	2.2	10.8	0.0	
	TOT PCT	0.2	0.0	0.2	0.5	0.8	5.5	0.0	
COLUMN TOTAL		31	22	13	18	225	334	12	655
		4.7	3.4	2.0	2.7	34.4	51.0	1.8	100.0

NUMBER OF MISSING OBSERVATIONS = 613

FIGURE 1

FACTORS INFLUENCING LABOR MARKET OUTCOMES

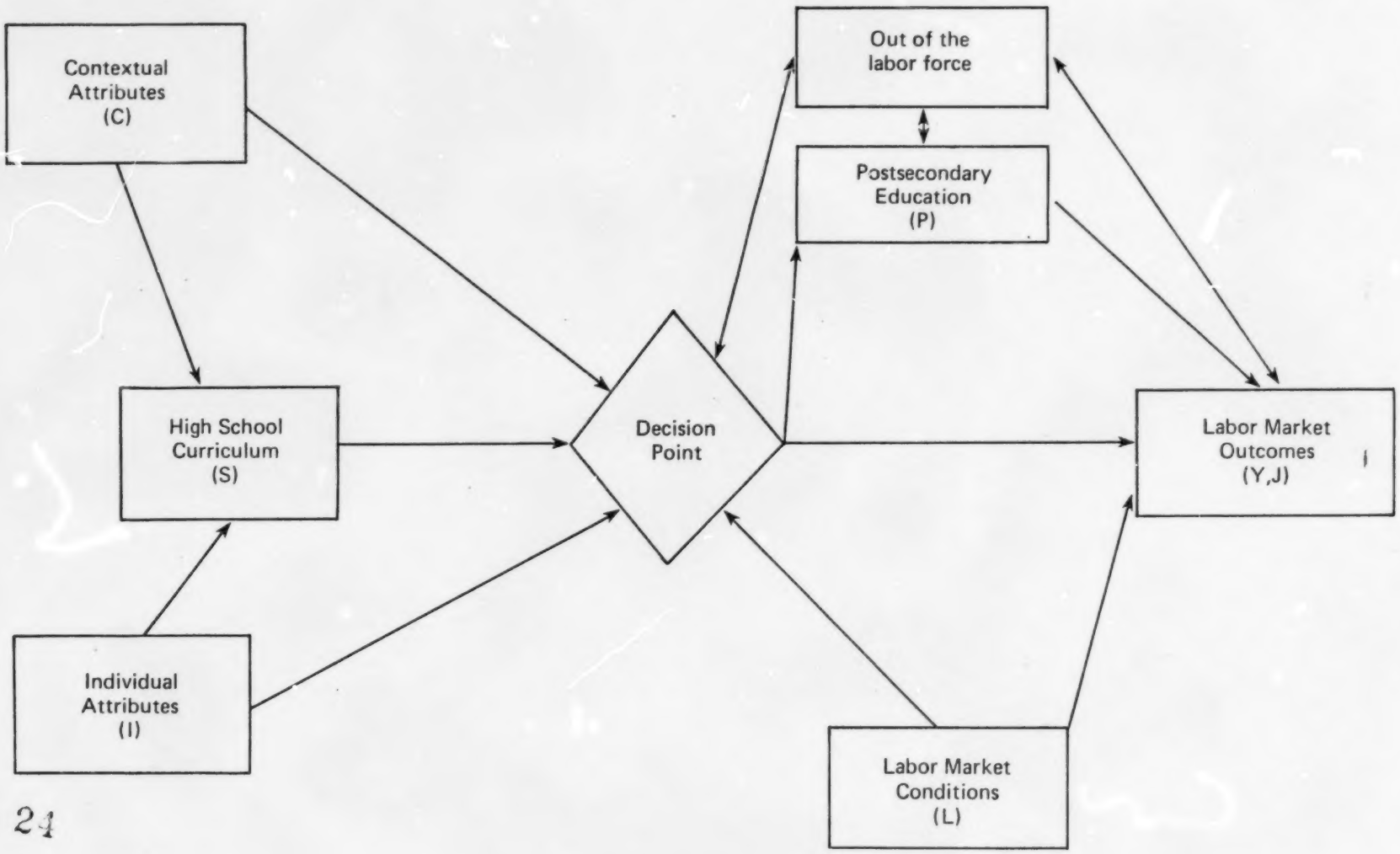

TABLE 4

FACTORS AFFECTING LABOR MARKET OUTCOMES

Contextual Attributes

- Region
- "Environment"
- Community SES

High School Experience

- Basic skills
- Curriculum satisfaction (would repeat curriculum)
- Vocational
  - Program Area
  - Specific Jobs
- Job skills
- Job-seeking skills
- Employability skills
- Placement assistance
- Intensity of study
- Certificate

Individual Attributes

- Ability
- Motivation
- Sex
- Race
- Family SES
- Physical limitations
- Marital status
- Age

Labor Market Conditions

- Industry Mix
- Labor Demand
- Region
- Urban/Rural Location

Out of Labor Force

- Family
- Military
- (Military training)

TABLE 4 (cont.)

Postsecondary

- Business, trade, technical program, private school
- Business, trade, technical program, public community college or technical institute
- Four-year college
- Advanced degree
- Government training programs

For each:

- Participation
- Length of participation
- Completion
- Certificate
- Use on job

Labor-Market Participation

Employment (current)

- Industry
- Occupation
- Unionization
- Pay
- Hours worked per week
- Weeks worked per year
- Relatedness to training
- Tenure
- Prestige

General Work History

- Apprenticeship
- Employer-sponsored training
- Work experience
- Number of jobs
- Months on longest job
- Recent unemployment

TABLE 5

EXPLANATORY VARIABLES USED IN REGRESSIONS

Abbreviation	Description
RACE	= 1 if respondent is nonwhite (except Oriental in the YAW data)
SES	= respondent's family socioeconomic status at age 14
RURAL	= 1 if respondent resides in rural area at interview date
EXPER	= potential labor force experience in years, age-18-(years of postsecondary education)
FEMALE	= 1 if respondent is female
CLPREP	= 1 if respondent's high school curriculum was college prep
BSNS	= 1 if respondent's high school curriculum was vocational with a specialty in business or commercial
TRADE	= 1 if curriculum was vocational, specialty in trade and industry
MARKET	= 1 if curriculum was vocational, specialty in distributive education
OTHER	= 1 if curriculum was vocational, specialty in agriculture, health, or occupational home economics
COLL4YR	= 1 if respondent completed a 4-year college program
ADVDEG	= 1 if respondent obtained a masters or other advanced degree
EMPSP	= 1 if respondent completed a formal training program (beyond OJT) sponsored by the employer
APP	= 1 if respondent completed an apprenticeship program
PVT	= 1 if respondent completed a program at a private 2-year college or technical institute (YAW only)
PCCT	= 1 if respondent completed a program at a public community college or 2-year technical institute (YAW only)
GOVT	= 1 if respondent completed a government training program such as CETA, Job Corps, or WIN
MOS	= 1 if respondent completed a military training program related to some civilian occupation
TENURE	= duration in years of the job being examined in the equation (unless otherwise indicated)
PAYRES	= 1 if respondent had some physical restriction that could affect his/her ability to compete in the labor-market
VOCATIONAL	= 1 if respondent had a high school vocational education curriculum in an area other than business or commercial (NLS-LME only)
VT2YR	= 1 if respondent completed a two-year vocational or technical program (Class of '72 only)

TABLE 5 (cont.)

Abbreviation	Description
AGE	= respondent's age at the time for which the dependent variable applies (NLS-LME only)
AGESQ	= AGE^2
UNEMP	= country unemployment rate at the time of the applicable job (NLS-LME only)
CITYCEN	= 1 if respondent resides in a central city area (NLS-LME only)
HSC16	= 1 if respondent completed exactly 16 years of education (NLS-LME only)
HSC16+	= 1 if respondent completed more than 16 years of education (NLS-LME only)
MARRIED	= 1 if respondent was married at the time of the interview
WIDOWED	= 1 if respondent was widowed at the time of the interview (NLS-LME only)
DIV/SEP	= 1 if respondent was divorced or separated at the time of the interview (NLS-LME only)
HOUSE	= 1 number of people in respondent's household at the time of the relevant job (NLS-LME only)
MDHOUSE	= 1 if HOUSE could not be calculated because of missing data (NLS-LME only)

TABLE 6

COMPLETION OF A PUBLIC COMMUNITY COLLEGE
OR TECHNICAL INSTITUTE
YOUNGER ADULT WORKERS

	Men B (t)	Women B (t)
MARRIED	-	-.02 (.75)
RACE	-.01 (.28)	-.01 (.21)
SES	-.02 (.92)	-.01 (.47)
RURAL	-.03 (.92)	.03 (1.03)
CLPREP	-.05 (1.53)	-.04 (.97)
BSNS	-.02 (.39)	-.01 (.28)
MARKET+	.32 (2.92)**	-.07 (.76)
TRADE	.02 (.59)	.10 (1.26)+
OTHER	-.10 (1.53)	-.06 (.95)
PHYRES	.06 (1.05)	-.13 (1.91)*
n	635	605
R^2	.03	.02
$\bar{R}^2$	.02	.00
F	2.35	1.03

* p < .10
**p < .05
+ Indicates that this estimate is based on fewer than 20 nonzero observations.

TABLE 7

COMPLETION OF A VOCATIONAL-TECHNICAL PROGRAM
CLASS OF '72

	Men B (t)	Women B (t)
RACE	.00 (.22)	.00 (.10)
RURAL	-.02 (2.63)**	-.02 (2.35)**
SES	-.00 (1.12)	-.00 (.00)
CLPREP	.04 (4.34)**	.06 (5.86)**
BSNS	-.01 (.21)	-.02 (1.91)*
MARKET	-.04 (1.35)	-.03 (.78)
TRADE	.07 (4.70)**	.08 (1.95)*
OTHER	.01 (.24)	-.02 (.73)
n	7,732	6,840
R^2	.01	.01
$\bar{R}^2$	.01	.01
F	6.54	9.17

* $p < .10$
** $p < .05$

TABLE 8

COMPLETION OF A BUSINESS OR TECHNICAL
INSTITUTE PROGRAM
NLS-LME

	Boys B (t)	Girls B (t)
HSC16+	-.01 (.27)	-.01 (.42)
UNEMP	.00 (.31)	-.00 (.42)
AGE	.05 (.99)	.02 (.46)
RACE	-.03 (1.43)	.02 (1.18)
BSNS	-.03 (.79)	.02 (.78)
AGESQ	.00 (.75)	-.00 (.39)
SES	.00 (1.00)	-.00 (.29)
VOCATIONAL	-.03 (1.23)	-.04 (.96)
CLPREP	-.03 (1.56)	.00 (.23)
RURAL	-.04 (1.78)*	-.03 (1.46)
CITYCEN	-.00 (.08)	-.02 (1.32)
SOUTH	-.01 (.71)	
HSC16	-.06 (3.06)**	-.04 (2.01)**
MARRIED		-.02 (.95)
WIDOWED		-.10 (.81)
DIV/SEP		-.01 (.56)
MDHOUSE		-.01 (.38)
HOUSE		-.01 (1.71)*
n	1,416	1,236
R^2	.04	.02
$\bar{R}^2$	.03	.00
F	4.09	1.14

* $p < .10$
** $p < .05$
+ Indicates that this estimate is based on fewer than 20 nonzero observations.

TABLE 9

COMPLETION OF A FOUR-YEAR COLLEGE OR UNIVERSITY
YOUNGER ADULT WORKERS

	Women B (t)	Men B (t)
MARRIED	-.02 (.72)	-
RACE	-.06 (1.42)	-.01 (.30)
SES	.12 (4.73)**	.06 (2.58)**
RURAL	-.01 (.22)	-.02 (.59)
CLPREP	.31 (6.76)**	.33 (7.93)**
BSNS	-.10 (2.57)**	-.04 (.60)
MARKET	-.11 (1.04)+	.06 (.48)
TRADE	-.06 (.76)	-.11 (2.65)**
OTHER	-.13 (1.80)*	-.05 (.66)
PHYRES	-.01 (.07)	.01 (.16)
n	605	635
R^2	.26	.23
$\bar{R}^2$	.25	.22
F	21.13	20.76

* $p < .10$
** $p < .05$
+ Indicates that this estimate is based on fewer than 20 nonzero observations.

TABLE 10

COMPLETION OF FOUR-YEAR COLLEGE PROGRAM
CLASS OF '72

	Men B (t)	Women B (t)
RACE	-.01 (1.52)	.00 (.25)
RURAL	-.07 (7.66)**	-.06 (5.88)**
SES	-.00 (.08)	.00 (1.59)
CLPREP	.31 (29.55)**	.32 (28.21)**
BSNS	-.12 (3.96)**	-.16 (11.41)**
MARKET	-.12 (3.96)**	-.11 (2.76)**
TRADE	-.14 (8.55)**	-.15 (3.17)**
OTHER	-.09 (3.09)**	-.12 (4.54)**
n	7,732	6,840
R^2	.17	.19
$\overline{R}^2$	.17	.19
F	197.50	206.39

**$p < .05$

TABLE 11

COMPLETION OF APPRENTICESHIP TRAINING
YOUNGER ADULT WORKERS

	Women B (t)	Men B (t)
MARRIED	-.03 (1.16)	-
RACE	-.05 (1.54)	-.01 (.30)
SES	.01 (.71)	.01 (.40)
RURAL	-.01 (.51)	-.04 (1.23)
CLPREP	.09 (2.72)**	.05 (1.20)
BSNS	.00 (.05)	.09 (1.51)
MARKET+	-.06 (.75)	.13 (1.07)
TRADE	.13 (2.24)**+	.09 (2.23)**
OTHER	.03 (.59)	.10 (1.41)
PHYRES	-.05 (.87)	.16 (2.33)**
N	605	635
R^2	.04	.02
$\bar{R}^2$	.03	.00
F	2.61	1.54

**p < .05
+ Indicates that this estimate is based on fewer than 20 nonzero observations.

TABLE 12

COMPLETION OF APPRENTICESHIP TRAINING
CLASS OF '72

	Men B (t)	Women B (t)
RACE	-.00 (.48)	.00 (3.00)**
RURAL	-.00 (.32)	-.00 (1.21)
SES	-.00 (1.29)	.00 (.90)
CLPREP	.00 (.03)	.00 (.56)
BSNS	.00 (.55)	.00 (.26)
MARKET	.03 (2.86)**	-.00 (.49)
TRADE	.01 (2.15)**	.01 (1.78)*
OTHER	.00 (.34)	.00 (.48)
n	7,732	6,840
R^2	.00	.00
$\bar{R}^2$	.00	.00
F	1.87	1.91

* $p < .10$
** $p < .05$

TABLE 13

COMPLETION OF EMPLOYER-SPONSORED TRAINING
YOUNGER ADULT WORKERS

	Women B (t)	Men B (t)
MARRIED	.04 (1.29)	-
RACE	.03 (.66)	.02 (.38)
SES	-.02 (.70)	.03 (1.19)
RURAL	-.04 (1.13)	-.00 (.03)
CLPREP	.09 (1.80)*	.07 (1.45)
BSNS	.03 (.68)	.01 (.13)
MARKET+	.19 (1.64)*	.29 (2.09)**
TRADE	.09 (.96)+	.08 (1.72)*
OTHER	.07 (.87)	-.02 (.30)
PHYRES	-.03 (.34)	-.03 (.39)
n	605	635
R^2	.01	.02
$\bar{R}^2$	-.00	.00
F	.87	1.15

* p < .10
**p < .05
+ Indicates that this estimate is based on fewer than 20 nonzero observations.

TABLE 14

HOURLY EARNINGS, MOST RECENT JOB
YOUNGER ADULT WORKERS

Explanatory Variables	Men		Women	
	All B (t)	NOCOL B (t)	All B (t)	NOCOL B (t)
BSNS	-.57 (.99)	-.93 (1.08)	-.04 (.15)	.60 (1.65)*
MARKET+	1.48 (1.30)	1.94 (1.06)	-1.21 (1.79)*	-.86 (1.01)
TRADE	.36 (.94)	.57 (1.04)	1.46 (2.65)**	2.80 (3.33)*+
OTHER	.05 (.06)	-1.24 (1.40)	-.07 (.13)	.33 (.57)
CLPREP	.74 (1.80)*	1.95 (2.51)**	.25 (.77)	.80 (1.47)
SES	.06 (.24)	.21 (.52)	.33 (1.97)**	.26 (.98)
RURAL	-.78 (2.51)**	-.13 (.29)	-.87 (3.97)**	-1.23 (4.14)**
EXPER	.13 (4.94)**	.07 (2.08)**	.05 (2.69)**	.08 (2.59)**
RACE	-1.02 (2.35)**	-1.63 (2.53)**	-.39 (1.41)	-.38 (1.06)
COLL4YR	.66 (1.61)*		1.06 (3.64)**	
ADVDEG	1.74 (2.70)**		.59 (1.19)	
EMPSP	.24 (.69)		1.27 (5.40)**	
APP	.49 (1.26)		.37 (.98)	
PVT	.86 (2.23)**		.22 (.77)	
PCCT	-.33 (.76)		.48 (1.69)*	
GOVT	-1.36 (2.04)**		-1.14 (1.85)*	
MOS	.10 (.24)		-.44 (.62)	
CONSTANT	6.38	6.01	4.11	3.86
n	513	207	500	207
R^2	.16	.14	.22	.19
$\bar{R}^2$	.13	.10	.19	.16
F	5.60	3.66	7.86	5.29

* p < .10
**p < .05
+ Indicates that this estimate is based on fewer than 20 nonzero observations.

TABLE 15

HOURLY EARNINGS, MOST RECENT JOB
CLASS OF '72

	Men		Women	
Samples:	ALL	NOCOL	ALL	NOCOL
Explanatory Variables:	B (t)	B (t)	B (t)	B (t)
BSNS	-.60 (2.65)**	-.51 (1.31)	.22 (2.65)**	.48 (4.49)**
MARKET	.10 (.43)	.77 (2.03)**	-.29 (1.34)	-.05 (.18)
TRADE	.21 (1.71)*	-.15 (.72)	-.19 (.71)	.17 (.47)
OTHER	-.29 (1.35)	-.72 (2.15)**	-.36 (2.27)**	-.28 (1.45)
CLPREP	.12 (1.41)	.02 (.10)	.40 (6.03)**	.50 (3.55)**
RACE	-.02 (.56)	-.08 (1.04)	.02 (.65)	.02 (.43)
RURAL	-.50 (6.80)**	-.23 (1.50)	-.73 (12.72)**	-.67 (7.36)**
SES	-.01 (2.62)**	-.01 (2.29)**	-.00 (.47)	-.00 (.34)
TENURE	.14 (9.01)**		.14 (11.06)**	
EXPER	.09 (3.85)**		.02 (1.32)	
APP	2.50 (9.08)**		1.75 (3.13)**	
EMPSP	.75 (6.33)**		.79 (8.79)**	
MOS	-1.12 (5.02)**		.07 (.20)	
COLL4YR	.24 (2.49)**		.95 (13.24)**	
ADVDEG	.72 (3.59)**		.92 (6.01)**	
VT2YR	.22 (2.36)**		.34 (4.52)**	
GOVT	-.54 (1.81)*		-.58 (2.86)**	
CONSTANT	6.53	7.65	4.95	5.16
n	6733	2044	5783	1685
R^2	.05	.01	.14	.06
$\overline{R}^2$	.05	.01	.13	.05
F	21.42	2.40	53.06	12.67

* p < .10
**p < .05